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The eye of the adult imbecile



THE EYE OF THE ADULT IMBECILE.

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The following observations and conclusions are based upon the examination of the eyes of twenty young adult male imbeciles seen at the State Hospital for the Insane at Norristown, Pa., and are given as a contribution to the subject of the significance of the local conditions so generally found in adolescent and young adult eyes which are the victims of asthenopia, and are undergoing changes in refraction.

During the examination the following precautions were observed:

First. Care was taken to exclude all but the proper class of subjects.

Second. Subjects chosen whose eyes were free from extraneous disease or inflammation.

Third. Young adults were used.

Fourth. Males were taken.

Fifth. Every subject was submitted to the same routine examination.

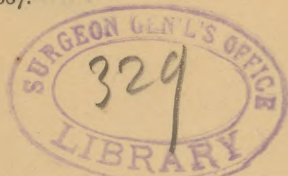
Observations.

Subjective.

First. Direct vision for form, as a rule, normal.

Second. Accommodative action: impossible to obtain any reliable result.

¹ Abstract of a paper read before the American Ophthalmological Society, July 21st, 1887.



Third. Visual fields: nothing could be gotten.

Fourth. Color perception probably normal.

Objective.

Fifth. Pupils generally relatively equal in size, but frequently opposed to each other in their long diameters.

Sixth. Irides equally, though sometimes sluggishly mobile to light-stimulus, convergence and accommodation.

Seventh. Extra-ocular motion intact in all directions; slight insufficiency of the interni found in one-half of the cases.

Eighth. Optic disc seemingly healthy; more so than would be expected for age.

Ninth. Physiological excavation frequent; usually small, shallow, oval in outline, and occupying a position slightly to the temporal side of the centre of the disc.

Tenth. Scleral ring as a rule visible all around disc, and slightly broader to the outer side.

Eleventh. Pigment massings beyond scleral ring generally limited to narrow concentric splotchings and double loops, with undisturbed areas beyond and between.

Twelfth. Entire absence of the so-called absorbed *conus*.

Thirteenth. Fibre-layer of the retina but very slightly increased in thickness.

Fourteenth. Very few lymph reflexes and opacities of vascular sheaths.

Fifteenth. Retinal vessels about normal in

comparative size, and in a few instances carrying impoverished blood.

Sixteenth. No change in the choroid, except a somewhat granular condition, more pronounced in macular region; this sometimes being accompanied by a slight absorption of epithelium (especially amongst the most intelligent).

Seventeenth. Almost equal degrees of H., with slight amount of As. present in every case.

Eighteenth. Absence of any congenital external or internal gross local malformation.

Nineteenth. The less imbecile the subject, the more common were the ordinary conditions seen in the used eyes of the mentally healthy.

It must be remembered that these observations do not hold absolutely good as written in every individual case, each subject presenting different degrees of the main features expressed in seemingly due proportion to amount of intelligence and consequent use of eyes for continued near-work. They merely show what should be expected in an average case, and thus serve to express the type.

Conclusions.

First. The present study tends to show that the adult eye of the imbecile is an organ which is capable of proper functional activity, and that the want of action is in the main due to what may be termed intellectual hebetude.

Second. By reason of mental incapacity

which has supervened in such subjects before the eye has been brought into continued and constant action as an instrument of accurate and delicate use, the ordinary appearances seen in the used eyes of the mentally healthy are lessened in due proportion to the amount of work given to the organ.

Third. The want of these physical changes, presenting a picture almost identical to the one seen during infantile existence, may be considered as typical of an unused, healthy, adult, human eye.

Fourth. The healthy eye of the adult imbecile, therefore, serves to teach us that the various conditions known as insufficiency of the interni, dirty red-gray appearance of the optic-disc, irregularity of physiological excavation, non-visibility of the superior and inferior portion of the scleral ring, absorbing conuses in all of their varieties, increase in density and thickness of the retinal fibres, opacities of vascular lymph-sheaths, disturbed states of the choroid, and gross errors in astigmatism with changes in indices of refraction, which are so frequent in the used eye of the mentally healthy, must be considered as pathological changes, expressive of low inflammatory action, with stretching and distortion from increased intraocular and extraocular pressure; these being representative not only of general want of tone so often seen amongst those of sedentary life, but of constant and frequent abuse of a delicate organ.

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